

WHAT IS CLAIMED IS:

1. A piping connector comprising:

a socket in a tubular shape attached to an end of  
5 one pipe to be connected;

a plug in a tubular shape attached to an end of other  
pipe;

a seal ring arranged at an inner periphery of the  
socket for sealing an interval between the inner periphery  
10 of the socket and an outer periphery of the plug in  
airtight; and

a hold ring fixedly attached to the inner periphery  
of the socket for restricting the seal ring from moving  
in an axial direction, wherein:

15 the pair of pipes are connected by inserting the  
plug to fit to the socket; and

the hold ring includes a groove in a ring-like shape  
for constituting a burr storing space at an outer periphery  
thereof and is welded to the inner periphery of the socket  
20 by ultrasonic welding.

2. The piping connector according to Claim 1,  
wherein

in the ultrasonic welding, a portion of the hold  
25 ring pressed to the inner periphery of the socket is

constituted by a corner portion faced in a curved shape having a radius of curvature of 0.2 through 0.5mm.

3. The piping connector according to Claim 1,  
5 wherein

the inner periphery of the socket is provided with a first diameter contracted portion and a second diameter contracted portion from a side of an inserting port of the plug, the hold ring is pressed to the first diameter  
10 contracted portion to weld and a stepped portion for constituting a stopper and a burr stopper in welding the hold ring is formed between the first diameter contracted portion and the second diameter contracted portion.

15 4. A method of fabricating a piping connector wherein a socket in the tubular shape attached to an end of one pipe to be connected, a plug in a tubular shape attached to an end of other pipe, a seal ring arranged at an inner periphery of the socket for sealing an interval  
20 between the inner periphery of the socket and an outer periphery of the plug in airtight, and a hold ring fixedly attached to the inner periphery of the socket for restricting the seal ring from moving in an axial direction, in which the pair of pipes are connected by inserting  
25 the plug to fit to the socket, the method comprising:

providing the inner periphery of the socket with a first diameter contracted portion and a second diameter contracted portion from a side of an inserting port of the plug;

5           welding the hold ring to the first diameter contracted portion by applying an ultrasonic wave to the hold ring while being pressed to the first diameter contracted portion;

10           stopping the ultrasonic wave from being applied before the hold ring is brought into contact with a stepped portion formed between the first diameter contracted portion and the second diameter contracted portion and thereafter; and

15           pressing the hold ring further to be brought into contact with the stepped portion.